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                Web Page URLs for STN Seminar Schedule - N. America
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                 "Ask CAS" for self-help around the clock
NEWS 3 Jun 03 New e-mail delivery for search results now available
NEWS
     4 Aug 08
                PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 5 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
NEWS
        Aug 26
                Sequence searching in REGISTRY enhanced
NEWS
     7
        Sep 03
                JAPIO has been reloaded and enhanced
NEWS 8
        Sep 16 Experimental properties added to the REGISTRY file
NEWS 9
        Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 10 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11 Oct 24 BEILSTEIN adds new search fields
NEWS 12 Oct 24 Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT
NEWS 14 Nov 25 More calculated properties added to REGISTRY
NEWS 15 Dec 04 CSA files on STN
NEWS 16 Dec 17 PCTFULL now cove
                PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17
        Dec 17
                TOXCENTER enhanced with additional content
NEWS 18
        Dec 17 Adis Clinical Trials Insight now available on STN
NEWS 19 Jan 29 Simultaneous left and right truncation added to COMPENDEX,
                 ENERGY, INSPEC
NEWS 20 Feb 13 CANCERLIT is no longer being updated
NEWS 21 Feb 24 METADEX enhancements
NEWS 22 Feb 24 PCTGEN now available on STN
NEWS 23 Feb 24 TEMA now available on STN
NEWS 24 \, Feb 26 \, NTIS now allows simultaneous left and right truncation
NEWS 25
        Feb 26 PCTFULL now contains images
NEWS 26
        Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results
        Mar 20
NEWS 27
                EVENTLINE will be removed from STN
NEWS 28
        Mar 24
                PATDPAFULL now available on STN
NEWS 29
        Mar 24 Additional information for trade-named substances without
                 structures available in REGISTRY
NEWS 30
        Apr 11
                Display formats in DGENE enhanced
NEWS 31
        Apr 14
                MEDLINE Reload
NEWS 32
        Apr 17
                 Polymer searching in REGISTRY enhanced
NEWS 33
                 Indexing from 1947 to 1956 added to records in CA/CAPLUS
         Jun 13
NEWS 34
        Apr 21 New current-awareness alert (SDI) frequency in
                 WPIDS/WPINDEX/WPIX
NEWS 35
        Apr 28
                 RDISCLOSURE now available on STN
NEWS 36
        May 05
                 Pharmacokinetic information and systematic chemical names
                 added to PHAR
NEWS 37
        May 15 MEDLINE file segment of TOXCENTER reloaded
NEWS 38 May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated
        May 16 CHEMREACT will be removed from STN
NEWS 40 May 19 Simultaneous left and right truncation added to WSCA
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10197960.1 Page 2

NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and right truncation

NEWS 42 Jun 06 Simultaneous left and right truncation added to CBNB

NEWS 43 Jun 06 PASCAL enhanced with additional data
NEWS 44 Jun 20 2003 edition of the FSTA Thesaurus is now available
NEWS 45 Jun 25 HSDB has been reloaded

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 30 JUN 2003 HIGHEST RN 540462-79-1 DICTIONARY FILE UPDATES: 30 JUN 2003 HIGHEST RN 540462-79-1

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>

Page 3

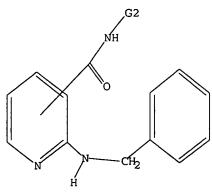
Uploading 10197960.1

STRUCTURE UPLOADED Ll

=> d l1

L1 HAS NO ANSWERS

L1



G1 CH2, CH, SQ2 G2 Cb,Cy,Hy

Structure attributes must be viewed using STN Express query preparation.

SAMPLE SEARCH INITIATED 09:32:25 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 3196 TO ITERATE

31.3% PROCESSED

1000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

60531 TO 67309 1 TO 170

PROJECTED ANSWERS:

1 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 09:32:33 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 63486 TO ITERATE

100.0% PROCESSED 63486 ITERATIONS

SEARCH TIME: 00.00.08

90 ANSWERS

1 ANSWERS

L3

L2

90 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

148.15 148.36

Patel

<7/1/2003>

10197960.1 Page 4

FILE 'CAPLUS' ENTERED AT 09:32:46 ON 01 JUL 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 1 Jul 2003 VOL 139 ISS 1 FILE LAST UPDATED: 30 Jun 2003 (20030630/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s 13
T.4
              15 L3
=> d l4 fbib hitstr abs total
     ANSWER 1 OF 15 CAPLUS COPYRIGHT 2003 ACS
L4
     2003:417626 CAPLUS
AN
DN
     139:6865
     Nicotinoyl- or isonicotinoylaminobenzothiazoles as A2A receptor ligands
TI
IN
     Flohr, Alexander; Jakob-Roetne, Roland; Norcross, Roger David; Riemer,
PA
     F. Hoffmann-La Roche A.-G., Switz.
SO
     PCT Int. Appl., 77 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                         KIND DATE
                                                 APPLICATION NO. DATE
                        ----
                                                 -----
                                                                     ------
                                                WO 2002-EP12562 20021111
PΙ
     WO 2003043636
                         A1
                                20030530
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
               GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
          PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NB,
               PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
               NE, SN, TD, TG
                                                  EP 2001-127312 A 20011119
IT
     535924-40-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
      (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
```

Patel

(Uses)

(prepn. of nicotinoyl- or isonicotinoylaminobenzothiazoles as A2A receptor ligands)

- RN 535924-40-4 CAPLUS
- CN 4-Pyridinecarboxamide, N-[4-methoxy-7-(4-morpholinyl)-2-benzothiazolyl]-2[(phenylmethyl)amino]- (9CI) (CA INDEX NAME)

Ι

GI

AB Title compds. I [R = 2-substituted 4-pyridyl, 4-substituted 3-pyridyl; R1 = Ph, piperidin-1-yl, morpholinyl] were prepd. for use as adenosine A2A receptor ligands. Thus, 4-methoxy-7-morpholinobenzothiazole-2-amine was acylated with 2-chloroisonicotinoyl chloride and treated with HOCH2CH2OMe to give I [R = 2-(2-methoxyethoxy)pyridin-4-yl, R1 = morpholino] which had a pKi for the human A2A receptor of 8.50.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2003 ACS
- AN 2003:242305 CAPLUS
- DN 138:271675
- TI Preparation of 4,5-dihydro-1H-benzo[g]indazole-3-carboxamides for the treatment of inflammation
- IN Bergmanis, Arija A.; Bonafoux, Dominique; Clare, Michael; Crich, Joyce Z.; Fletcher, Theresa R.; Geng, Lifeng; Hagen, Timothy J.; Hamper, Bruce C..; Hanson, Gunnar J.; Houdek, Stephen C.; Huang, He; Iula, Donna M.; Koszyk, Francis J.; Lennon, Patrick J.; Liao, Shuyuan; Liao, Subo; Metz, Suzanne; Mohler, Scott B.; Nguyen, Maria; Oburn, David S.; Owen, Thomas J.; Partis, Richard A.; Scates, Angela M.; Stealey, Michael A.; Tollefson, Michael B.; Vazquez, Michael L.; Weier, Richard M.; Wolfson, Serge G.; Xu, Xiangdong
- PA Pharmacia Corporation, USA
- SO PCT Int. Appl., 331 pp.

CODEN: PIXXD2

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DT Patent
LA English
FAN.CNT 1
PATENT NO.
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PΙ

RN

KIND DATE APPLICATION NO. DATE ----------WO 2003024935 A2 20030327 WO 2002-US29774 20020919 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2001-323423PP 20010919 US 2002-379090PP 20020509

OS MARPAT 138:271675

IT 503555-09-7P, 1-(1,3-Benzodioxol-5-yl)-8-[[[2-[(4-methoxybenzyl)amino]pyridin-3-yl]carbonyl]amino]-4,5-dihydro-1H-benzo[g]indazole-3-carboxamide

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(IKK2 inhibitor; prepn. of benzo[g]carboxamides as IKK2 inhibitors for treatment of cancer, inflammation, and inflammation-assocd. disorders) 503555-09-7 CAPLUS

CN 1H-Benz[g]indazole-3-carboxamide, 1-(1,3-benzodioxol-5-yl)-4,5-dihydro-8-[[[2-[[(4-methoxyphenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

GΙ

AΒ The present invention relates to substituted pyrazolyl derivs., compns. comprising such, intermediates, methods of making substituted pyrazolyl derivs., and methods for treating cancer, inflammation, and inflammation-assocd. disorders, such as arthritis. Title compds. I [wherein A = (un) substituted (CH2) m; m = 0-3; B = (un) substituted (hetero)aryl; X = N or C; Y and Z = independently N, C, CH, CR3, S, or O; R1 = H, halo, (halo)alkyl, (hetero)aryl, alkenyl, alkynyl, CN, NO2, alkoxy(carbonyl), carbamoyl, acyl, alkylthio, sulfamoyl, ureido, etc.; R2 = H, halo, (halo)alkyl, hydroxyalkyl, alkoxy, CN, NO2, alkylthio, amino, carbamoyl, ureido, CO2H, etc.; R3 = (un)substituted amidine, alkylamino, aminoalkyl, carbamoyl, NH2, or acylamino(methyl); R4 = H, halo, alkylsulfinyl, alkylsulfonyl, CN, alkoxycarbonyl, (halo)alkyl, hydroxyalkyl, haloalkoxy, heterocyclyl, NO2, acylamino, (hetero)aryl, alkenyl, alkoxy, alkylthio, sulfamoyl, acyl, ureido, carbamoyl, etc.; R5 = H, or (un) substituted (aryl) alkyl, (hetero) aryl, heterocyclylalkyl, or heteroarylalkyl; R11 = H, halo, (halo)alkyl, CN, alkoxycarbonyl, alkenyl, alkynyl, alkoxy, carbamoyl, etc.; R12 = H, halo, alkyl, or alkoxy; with provisos; and isomers, tautomers, carriers, esters, prodrugs, and pharmaceutically acceptable salts thereof] were prepd. via conventional and solid phase synthetic methods as I.kappa.B protein kinase .beta. (IKK.beta. or IKK2) inhibitors. For example, reaction of 7-nitro-1-tetralone with Et acetate in the presence of Li bis(trimethylsilyl)amide in ether gave the 1,3-diketone (87%), which was cyclized with 4-sulfonamidophenylhydrazine.bul.HCl with HCl in MeOH to give the Et 1H-dihydrobenzo[g]indazolecarboxylate (69%). Amidation with NH3OH in MeOH provided II. In IKK.beta. resin enzyme assays, I exhibited IKK.beta. activity with IC50 values ranging from .ltoreq. 1 .mu.M to > 100 .mu.M. Thus, I are useful for treating cancer, inflammation, and inflammation-assocd. disorders, such as arthritis (no data).

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L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2003 ACS
```

AN 2003:242160 CAPLUS

DN 138:271705

TI Preparation of triazinyl and other carboxamides as inhibitors of histone deacetylase

PA Methylgene, Inc., Can.

SO PCT Int. Appl., 347 pp. CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

Patel

<7/1/2003>

Page 8

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PATENT NO.
                         KIND DATE
                                                 APPLICATION NO. DATE
      _ _ _ _ . . . . . . . . . . . .
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                                                  ______
                                                 WO 2002-US29017 20020912
PT
     WO 2003024448
                          A2
                                20030327
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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               TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
               CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
               PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
               NE, SN, TD, TG
                                                  US 2001-322402PP 20010914
                                                  US 2002-391728PP 20020626
OS
     MARPAT 138:271705
     503039-04-1P, N-(2-Aminophenyl)-6-[(4-
     methoxybenzyl)amino]nicotinamide 503042-57-7P,
     N-(2-Aminophenyl)-6-(((4-fluorophenyl)methyl)amino)nicotinamide
     503042-58-8P, N-(2-Aminophenyl) 6 (((3,4,5-
     trimethoxyphenyl)methyl)amino)nicotinamide
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
      (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
      (Uses)
          (drug candidate; prepn. of triazinyl and other carboxamides as
         inhibitors of histone deacetylase for treating cell proliferative
         disorders)
RN
      503039-04-1 CAPLUS
CN
      3-Pyridinecarboxamide, N-(2-aminophenyl)-6-[[(4-
     methoxyphenyl)methyl]amino] - (9CI) (CA INDEX NAME)
```

RN 503042-57-7 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-aminophenyl)-6-[[(4-fluorophenyl)methyl]amino]-(9CI) (CA INDEX NAME)

RN 503042-58-8 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-aminophenyl)-6-[[(3,4,5-trimethoxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)

GΙ

The invention relates to triazines (shown as I; variables defined below; e.g. 4-[[4-amino-6-(2-indanylamino)-[1,3,5]triazin-2-ylamino]methyl]-N-(2aminophenyl)benzamide) and Cy3-X1-Ar2-(C(R5):C(R6))qC(O)NH-Ay2 (II; variables defined below; e.g.), many of which are N-(oaminophenyl)carboxamides, as inhibitors of histone deacetylase (data included for many I and II). The invention provides compds. and methods for inhibiting histone deacetylase enzymic activity. The invention also provides compns. and methods for treating cell proliferative diseases and conditions. Antineoplastic effects of some I and II are illustrated for colorectal, pulmonary and pancreatic neoplasms; also the combined antineoplastic effect of histone deacetylase inhibitors and histone deacetylase antisense oligonucleotides on tumor cells in vivo was demonstrated. For I: R3 and R4 = H, L1, Cy1 and -L1-Cy1 (L1 = C1-C6 alkyl, C2-C6 heteroalkyl, or C3-C6 alkenyl; Cy1 = cycloalkyl, aryl, heteroaryl, or heterocyclyl) or R3 and R4 are taken together with the adjacent N atom to form a 5-, 6-, or 7-membered ring, wherein the ring atoms = C, O, S, and N, and wherein the ring is optionally substituted, and optionally forms part of a bicyclic ring system, or is optionally . fused to one or two aryl or heteroaryl rings, or to one or two satd. or partially unsatd. cycloalkyl or heterocyclic rings, each of which rings and ring systems is optionally substituted. Y1 = -N(R1)(R2), -CH2-C(0)-N(R1)(R2), halogen, and H (R1 and R2 = H, L1, Cy1, and -L1-Cy1). Y2 = chem. bond or N(R0) (R0 = H, alkyl, aryl, aralkyl, and acyl); Ak1 = C1-C6 alkylene, C1-C6-heteroalkylene (preferably, in which one -CH2- is replaced with -NH-, and more preferably -NH-CH2), C2-C6 alkenylene or C2-C6 alkynylene; Arl = arylene or heteroarylene, either of which is ---optionally substituted; and Z1 = C(0)NH-Ay1 and CH:CHC(0)NH-Ay1 (Ay1 = aryl or heteroaryl, each of which is optionally substituted). For II: Cy2 = cycloalkyl, aryl, heteroaryl, or heterocyclyl; X1 = covalent bond, M1-L2-M1, and L2-M2-L2 (L2 = chem. bond, C1-C4 alkylene, C2-C4 alkenylene, and C2-C4 alkynylene, provided that L2 is not a chem. bond when X1-is M1-L2-M1; M1 = -0-, -N(R7)-, -S-, -S(0)-, S(0)2-, -S(0)2N(R7)-, -N(R7)S(O)2-, -C(O)-, -C(O)NH-, -NHC(O)-, -NHC(O)-O- and -OC(O)NH- (R7 = H, alkyl, aryl, aralkyl, acyl, heterocyclyl, and heteroaryl); and M2 = M1, heteroarylene, and heterocyclylene, either of which rings is optionally substituted). Ar2 = arylene or heteroarylene, each of which is optionally substituted; R5 and R6 = H, alkyl, aryl, and aralkyl; q is 0 or 1; and Ay2 . is a 5-6 membered cycloalkyl, heterocyclyl, or heteroaryl substituted with

10197960.1

Page 10

an amino or hydroxy moiety (preferably these groups are ortho to the amide N to which Ay2 is attached) and further optionally substituted; provided that when Cy2 is naphthyl, X1 is -CH2-, Ar2 is Ph, R5 and R6 are H, and q is 0 or 1, Ay2 is not Ph or o-hydroxyphenyl. Although the methods of prepn. are not claimed, hundreds of example prepns. are included.

```
ANSWER 4 OF 15 CAPLUS COPYRIGHT 2003 ACS
L4
ΑN
     2003:22869 CAPLUS
DN
     138:89806
TI
     Preparation of arylpyrazoles as soluble epoxide hydrolase inhibitors for
     treatment of cardiovascular disease.
ΙN
     Ingraham, Richard H.; Proudfoot, John R.
PA
     Boehringer Ingelheim Pharmaceuticals Inc., USA
SO
     PCT Int. Appl., 44 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                             APPLICATION NO.
                                                                DATE
PΤ
     WO 2003002555
                             20030109
                       <u>A 1</u>
                                             WO 2002-US18752 20020614
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              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
              CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                              US 2001-302066PP 20010629
     US 2003022929
                              20030130
                        A1
                                              US 2002-172457
                                                                20020614
                                              US 2001-302066PP 20010629
     MARPAT 138:89806
OS
ΙT
     483342-21-8P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
         (prepn. of arylpyrazoles as sol. epoxide hydrolase inhibitors for
        treatment of cardiovascular disease)
```

3-Pyridinecarboxamide, 2-[(phenylmethyl)amino]-N-[4-[3-(3-pyridinyl)-5-(trifluoromethyl)-1H-pyrazol-1-yl]phenyl]- (9CI) (CA INDEX NAME)

483342-21-8 CAPLUS

GΙ

RN

CN

$$R^2$$
 N
 LR^4
 R^8
 I

AB A method of treating cardiovascular disease comprises administration of title compds. [I; R1, R3 = CF3, halo, cyano, alkyl, alkenyl, alkynyl, (substituted) cycloalkyl, heterocyclyl, etc.; R2 = H, halo, Me; L = NHCO, NHCS, NH, NHCH2, NHCOCO, etc.; R4 = (substituted) alkyl, alkoxy, alkylthio, alkylamino, alkoxyalkyl, alkylthioalkyl, carbocyclyl, heterocyclyl, etc.; R8 = H, NH2] (no data). Thus, 2-chloronicotinic acid in MeCN was treated with EDC and then with 1-(4-aminophenyl)-3-(3-pyridyl)-5-trifluoromethylpyrazole under ice cooling followed by stirring for 1 h to give I (R1 = 3-pyridyl; R2, R8 = H; R3 = CF3; L = NHCO; R4 = 2-chloropyridin-3-yl).

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L4
    ANSWER 5 OF 15 CAPLUS COPYRIGHT 2003 ACS
ΑN
     2002:637637 CAPLUS
DN
     137:185325
ΤI
     Preparation of acylated 6,7,8,9-tetrahydro-5H-benzocycloheptenylamines as
     stimulators of endothelial NO-synthase transcription
     Strobel, Hartmut; Wohlfart, Paulus
IN
PA
     Aventis Pharma Deutschland Gmbh, Germany
     PCT Int. Appl., 101 pp.
SO
     CODEN: PIXXD2
DT
     Patent
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     English
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     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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PΙ WO 2002064546 A2 20020822 WO 2002-EP1449 20020212 **A3** WO 2002064546 20021107 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, ... : 🚟 🗀 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 2001-102853 A 20010213 US 2003008915 A1 20030109 US 2002-73203 20020213 -

OS MARPAT 137:185325

450368-08-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(eNOS transcription stimulator; prepn. of acylated tetrahydrobenzocycloheptenylamines as stimulators of endothelial

Patel

EP 2001-102853 A 20010213

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10197960.1 Page 12

NO-synthase transcription)

RN 450368-08-8 CAPLUS

2-Pyridinecarboxamide, 3-chloro-6-[(phenylmethyl)amino]-N-(6,7,8,9-tetrahydro-5H-benzocyclohepten-6-yl)- (9CI) (CA INDEX NAME)

GΙ

AB Title compds. I [wherein R1 and R4 = independently H, (pseudo)halo, CF3, NO2, or (un) substituted alkyl, alkenyl, alkynyl, Ph, heteroaryl, amino, alkoxy, sulfamoyl, etc.; R2 and R3 = independently H, (pseudo)halo, OH, PhO, alkoxy, CF3, CN, NO2, or (un) substituted alkyl, amino, acylamino, etc.; A = CH2, CHOH, or CH(alkyl); B, C, and D = independently <math>CH2 or CH(alkyl); R5 = (un)substituted (hetero)aryl; and stereoisomers, mixts., or pharmaceutically acceptable salts thereof] were prepd. as stimulators of endothelial NO-synthase (eNOS) transcription, which has a vasodilating effect and inhibits the aggregation of platelets, the adhesion of leukocytes to the endothelium, and the proliferation of intimal smooth muscle cells. For example, amidation of 4-fluorobenzoic acid chloride with 6,7,8,9-tetrahydro-5H-benzocyclohepten-6-ylamine in the presence of TEA in dioxane afforded II. The latter activated eNOS transcription in primary human umbilical vein cord endothelial cells (HUVEC) with EC50 of 0.02 .mu.M. I are useful for the treatment of cardiovascular diseases, stable or unstable angina pectoris, coronary heart disease, Prinzmetal angina, acute coronary syndrome, heart failure, myocardial infarction, stroke, thrombosis, peripheral artery occlusive disease, endothelial dysfunction, atherosclerosis, restenosis, endothelial damage after PTCA, hypertension, essential hypertension, pulmonary hypertension, secondary hypertension, renovascular hypertension, chronic glomerulonephritis, erectile dysfunction, ventricular arrhythmia, diabetes, diabetes complications, nephropathy, retinopathy, angiogenesis, asthma bronchial, chronic renal failure, cirrhosis of the liver, osteoporosis, or restricted memory performance or for a restricted ability to learn, or the lowering of cardiovascular risk of postmenopausal women or after intake of contraceptives (no data).

10197960.1 Page 13

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     ANSWER 6 OF 15 CAPLUS COPYRIGHT 2003 ACS
AN
     2002:539663 CAPLUS
DN
     137:109210
ΤI
     Preparation of substituted arylamine derivatives and methods of use as
     antitumor agents
     Chen, Guoqing; Booker, Shon; Cai, Guolin; Croghan, Michael; Dipietro,
IN
     Lucian; Dominguez, Celia; Elbaum, Daniel; Germain, Julie; Huang, Qi; Kim, Joseph L.; Kim, Tae-Seong; Patel, Vinod F.; Smith, Leon M.; Tasker,
     Andrew; Xi, Ning; Xu, Shimin; Yuan, Chester Chenguang
     Amgen Inc., USA
PA
     PCT Int. Appl., 253 pp.
SO
     CODEN: PIXXD2
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     Patent
     English
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     PATENT NO.
                        KIND DATE
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PΙ
     WO 2002055501
                          A2
                                20020718
                                                  WO 2002-US742
                                                                      20020111
     WO 2002055501
                          A3
                                20021219
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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               CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
               BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                  US 2001-261360PP 20010112
                                                  US 2001-323686PP 20010919
                                                  US 2002-46526 A 20020110
     US 2002147198
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                                                  US 2002-46526
                                                                      20020110
                                                  US 2001-261360PP 20010112
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     MARPAT 137:109210
IT
     442847-21-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (prepn. of substituted aminopyridines as antitumor agents)
     442847-21-4 CAPLUS
RN
CN
     3-Pyridinecarboxamide, N-[2,3-dihydro-3,3-dimethyl-1-(4-piperidinylmethyl)----
     1H-indol-6-yl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)
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Page 14

IT 442845-74-1P 442845-77-4P 442846-13-1P 442846-17-5P 442846-22-2P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(target compd.; prepn. of substituted aminopyridines as antitumor agents)

RN 442845-74-1 CAPLUS

CN 3-Pyridinecarboxamide, 6-chloro-N-(3-fluoro-4-methylphenyl)-2-[[(4-methoxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 442845-77-4 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3-fluorophenyl)methyl]amino]-N-(4phenoxyphenyl)- (9CI) (CA INDEX NAME)

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RN 442846-13-1 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[[5-[[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]-2-(pentafluoroethyl)phenoxy]methyl]-, 1,1-dimethylethyl ester, (2R)- (9CI) (CA INDEX NAME)

Page 15

Absolute stereochemistry.

RN 442846-17-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[6-[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]-2,3-dihydro-3,3-dimethyl-1H-indol-1-yl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Age of the section of

RN 442846-22-2 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-acetyl-3,4-dihydro-2,2-dimethyl-2H-1,4-benzoxazin-6-yl)-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

IT 442845-75-2P 442845-76-3P 442845-78-5P 442845-79-6P 442845-80-9P 442845-81-0P 442845-82-1P 442845-83-2P 442845-84-3P 442845-85-4P 442845-86-5P 442845-87-6P 442845-88-7P 442845-89-8P 442845-90-1P 442845-91-2P 442845-92-3P 442845-93-4P 442845-97-8P 442845-97-8P 442845-99-0P 442846-00-6P 442846-01-7P 442846-02-8P 442846-03-9P 442846-04-0P 442846-05-1P 442846-09-5P 442846-10-8P 442846-12-0P 442846-14-2P

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<7/1/2003>

442846-15-3P 442846-16-4P 442846-18-6P 442846-19-7P 442846-20-0P 442846-21-1P 442846-23-3P 442846-24-4P 442846-25-5P 442846-26-6P 442846-27-7P 442846-28-8P 442846-29-9P 442846-30-2P 442846-31-3P 442846-32-4P 442846-35-7P 442846-36-8P 442846-38-0P 442846-39-1P 442846-40-4P 442846-42-6P 442846-44-8P 442846-46-0P 442846-48-2P 442846-50-6P 442846-53-9P 442847-23-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target compd.; prepn. of substituted aminopyridines as antitumor agents)

RN 442845-75-2 CAPLUS

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CN 3-Pyridinecarboxamide, 6-chloro-N-(3-fluoro-4-methylphenyl)-2-[[(4-methoxyphenyl)methyl]amino]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 442845-76-3 CAPLUS

3-Pyridinecarboxamide, 6-chloro-N-(4-chlorophenyl)-2-[[(4-methoxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)

CN

RN 442845-78-5 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-phenoxyphenyl)-2-[[[3-(trifluoromethyl)phenyl]methyl]amino]-(9CI) (CA INDEX NAME)

RN 442845-79-6 CAPLUS
CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 442845-80-9 CAPLUS

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<7/1/2003>

CN 3-Pyridinecarboxamide, N-(4-phenoxyphenyl)-2-[[[4-(trifluoromethyl)phenyl]methyl]amino]-(9CI) (CA INDEX NAME)

RN 442845-81-0 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(2-bromophenyl)methyl]amino]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 442845-82-1 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-phenoxyphenyl)-2-[[[4-(trifluoromethoxy)phenyl]methyl]amino]-(9CI) (CA INDEX NAME)

RN 442845-83-2 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(2,3-difluorophenyl)methyl]amino]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 442845-84-3 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-chlorophenyl)-2-[[(4-cyanophenyl)methyl]amino](9CI) (CA INDEX NAME)

RN 442845-85-4 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-chlorophenyl)-2-[[(2-cyanophenyl)methyl]amino]-

(9CI) (CA INDEX NAME)

RN 442845-86-5 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[4-(2-methylpropyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-87-6 CAPLUS

RN 442845-88-7 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3-methoxyphenyl)methyl]amino]-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-89-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3-aminophenyl)methyl]amino]-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-90-1 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[4-(1-methylethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-91-2 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-92-3 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3,4-dimethoxyphenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]-/(9CI) (CA INDEX NAME)

RN 442845-93-4 CAPLUS

CN 3-Pyridinecarboxamide, 2-[(phenylmethyl)amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-94-5 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3-chlorophenyl)methyl]amino]-N-[3-. (trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-95-6 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-bromophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-96-7 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-chlorophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-97-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(2,4-difluorophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442845-99-0 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3,4-difluorophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-00-6 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(2,3-difluorophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

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Page 26

RN 442846-01-7 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(2-fluorophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-02-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(2,6-difluorophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-03-9 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3-bromophenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-04-0 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-05-1 CAPLUS

CN 3-Pyridinecarboxamide, N-[3-[3-(dimethylamino)propyl]-5-(trifluoromethyl)phenyl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-06-2 CAPLUS

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CN 3-Pyridinecarboxamide, 2-[[[3-[3-(dimethylamino)propyl]-4-fluorophenyl]methyl]amino]-N-[4-(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-07-3 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[[3-[3-(dimethylamino)propyl]-4-fluorophenyl]methyl]amino]-N-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-08-4 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-bromo-2-fluorophenyl)-2-[[[3-[3-(dimethylamino)propyl]-4-fluorophenyl]methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-09-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-(1,1-dimethylethyl)-3-(1,2,3,6-tetrahydro-1-methyl-4-pyridinyl)phenyl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-10-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[[4-fluoro-3-[3-(4-morpholinyl)-1-propynyl]phenyl]methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} F_3C \\ \\ NH \\ C=0 \\ \\ \end{array}$$

RN 442846-12-0 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[3-[2-(1-pyrrolidinyl)ethoxy]-4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ N - CH_2 - CH_2 - O \end{array} \\ & & & \\ NH - C - CH_2 - CH_2 - O - CH_2 - CH_2$$

RN 442846-14-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[2-(1,1-dimethylethyl)-5-[[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]phenoxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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RN 442846-15-3 CAPLUS

CN 3-Pyridinecarboxamide, N-[2,3-dihydro-3,3-dimethyl-1-(1-methyl-4-piperidinyl)-1H-indol-6-yl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-16-4 CAPLUS

RN 442846-18-6 CAPLUS

CN Carbamic acid, [2-[6-[[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]-2,3-dihydro-3,3-dimethyl-1H-indol-1-yl]-2-oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 442846-19-7 CAPLUS

CN 2(1H)-Isoquinolinecarboxylic acid, 7-[[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]-3,4-dihydro-4,4-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 442846-20-0 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[[3-[[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]-5-(trifluoromethyl)phenoxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{C} \\ \text{COBu-t} \\ \text{N} \\ \text{CH}_2 \\ \text{O} \\ \text{NH} \\ \text{CF}_3 \end{array}$$

RN 442846-21-1 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[[2-(1,1-dimethylethyl)-5-[[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]phėnoxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 442846-23-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-[[3-[[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]-5-(trifluoromethyl)phenoxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 442846-24-4 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[4-(pentafluoroethyl)-3-[(2R)-2-pyrrolidinylmethoxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 442846-25-5 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[3-[(2R)-2-pyrrolidinylmethoxy]-5-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Page 35

Absolute stereochemistry.

RN 442846-26-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-(1,1-dimethylethyl)-3-(4-piperidinylmethoxy)phenyl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-27-7 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-(1,1-dimethylethyl)-3-[(2R)-2-pyrrolidinylmethoxy]phenyl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 442846-28-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-(1,2,3,4-tetrahydro-4,4-dimethyl-7-isoquinolinyl)- (9CI) (CA INDEX NAME)

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Page 37

RN 442846-29-9 CAPLUS

CN 3-Pyridinecarboxamide, N-[1-(aminoacetyl)-2,3-dihydro-3,3-dimethyl-1H-indol-6-yl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-30-2 CAPLUS

CN 3-Pyridinecarboxamide, N-[2,3-dihydro-3,3-dimethyl-1-(4-piperidinyl)-1H-indol-6-yl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

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Page 38

RN 442846-31-3 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[3-(4-piperidinylmethoxy)-5-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-32-4 CAPLUS.

CN 3-Pyridinecarboxamide, N-(3,4-dihydro-2,2-dimethyl-2H-1,4-benzoxazin-6-yl)-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-33-5 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[3-[[(2S)-1-methyl-2-pyrrolidinyl]methoxy]-5-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 442846-34-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[2,3-dihydro-3,3-dimethyl-1-[(1-methyl-4-piperidinyl)methyl]-1H-indol-6-yl]-2-[[(4-fluorophenyl)methyl]amino]-(9CI) (CA INDEX NAME)

10197960.1

RN 442846-35-7 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[4-[1-methyl-1-(1-methyl-4-piperidinyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)

RN 442846-36-8 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-(1,2,3,4-tetrahydro-4,4-dimethyl-2-oxo-7-quinolinyl)- (9CI) (CA INDEX NAME)

RN 442846-38-0 CAPLUS
CN 3-Pyridinecarboxamide, N-5-benzofuranyl-2-[[[3-(hydroxymethyl)phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-39-1 CAPLUS
CN 3-Pyridinecarboxamide, N-2-benzothiazolyl-2-[[[3-(hydroxymethyl)phenyl]methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-40-4 CAPLUS
CN 3-Pyridinecarboxamide, 2-[[(3,4-difluorophenyl)methyl]amino]-N-[4-(1,1-

dimethylethyl)-3-[[2-(1-piperidinyl)ethyl]amino]phenyl]- (9CI) (CA INDEX NAME)

RN 442846-42-6 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-(1,1-dimethylethyl)-3-[[2-(1-piperidinyl)ethyl]amino]phenyl]-2-[(phenylmethyl)amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 442846-44-8 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-(1,1-dimethylethyl)-3-[(1-piperidinylmethyl)amino]phenyl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 442846-46-0 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[[5-[[[2-[[(4-fluorophenyl)methyl]amino]-3-pyridinyl]carbonyl]amino]-2-(pentafluoroethyl)phenoxy]methyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 442846-48-2 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[4-(pentafluoroethyl)-3-(2-pyrrolidinylmethoxy)phenyl]- (9CI) (CA INDEX NAME)

RN 442846-50-6 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[3-(2-pyrrolidinylmethoxy)-5-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

10197960.1

$$\begin{array}{c} \text{CF}_3 \\ \text{CH}_2 \\ \text{NH} \\ \text{CH}_2 - \text{O} \end{array} \begin{array}{c} \text{CH}_2 \\ \text{NH} \\ \text{CH}_2 \\ \text{NH} \end{array}$$

RN 442846-52-8 CAPLUS
CN 3-Pyridinecarboxamide, N-[4-(1,1-dimethylethyl)-3-(2 pyrrolidinylmethoxy)phenyl]-2-[[(4-fluorophenyl)methyl]amino]- (9CI) (CA
 INDEX NAME)

Page 44

$$\begin{array}{c} \text{CH}_2\\ \text{CH}_2-\text{O} \end{array}$$

RN 442846-53-9 CAPLUS
CN 3-Pyridinecarboxamide, 2-[[(4-fluorophenyl)methyl]amino]-N-[3-[(1-methyl-2-pyrrolidinyl)methoxy]-5-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{NH} \\ \text{NH} \\ \text{CH}_2 - \text{O} \\ \text{NH} - \text{C} \\ \text{NH} \\ \text{CF}_3 \end{array}$$

RN 442847-23-6 CAPLUS
CN 3-Pyridinecarboxamide, 2-[[(3-fluorophenyl)methyl]amino]-N-(4-phenoxyphenyl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 442845-77-4 CMF C25 H20 F N3 O2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

GI

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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *
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Title compds. I [B1 and B2 independently equal C or N, wherein B1B2 form part of 5-6 membered heteroaryl ring A; R1 = one or more substituents selected from H, halo, oxo, (un) substituted cycloalkyl, phenylalkyl, etc.; R2 = (un)substituted cycloalkyl, cycloalkenyl, 6-10 membered aryl or 5-6 membered heterocyclyl, etc.; R3 = (un)substituted aryl; R4 = H, alkyl, (un) substituted Ph or aralkyl; X1 = bond, alkylenyl, alkenylenyl and alkynylenyl, where one of the CH2 groups may be substituted with O or NH, wherein X1 is optionally substituted with OH; X2 = (un) substituted N contg. linker, e.g., -NHCH2-], and there pharmaceutically acceptable derivs., are prepd. and disclosed as agents effective for prophylaxis and treatment of diseases, such as angiogenesis mediated diseases. Thus, II was prepd. via arylation of 1-dimethylamino-2-propyne with 3-bromo-5-trifluoromethylaniline, hydrogenation, amidation with 2-chloropyridine-3-carbonyl chloride and chloro-substitution with 4-phenoxyaniline. Selected compds. of the invention, e.g., II, inhibited VEGF-stimulated cell proliferation at a level below 50 nM. The invention encompasses novel compds., analogs, prodrugs and pharmaceutically acceptable derivs. thereof, pharmaceutical compns. and methods for prophylaxis and treatment of diseases and other maladies or conditions involving, cancer and the like.

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L4
      ANSWER 7 OF 15 CAPLUS COPYRIGHT 2003 ACS
AN
      2002:521710 CAPLUS
DN
      137:93690
ΤI
      Preparation of nicotinanilide-N-oxides as G-protein-coupled receptor
      antagonist for the treatment of inflammation due to neutrophil chemotaxis
IN
      Cutshall, Neil S.; Yager, Kraig M.
      Darwin Discovery Ltd., UK
PΑ
SO
      PCT Int. Appl., 73 pp.
      CODEN: PIXXD2
DT
      Patent
LΑ
      English
FAN: CNT 1
      PATENT NO.
                            KIND DATE
                                                       APPLICATION NO. DATE
      ______
                                                                             -----
PΤ
      WO 2002053544
                           A1 20020711
                                                      WO 2001-US47543 20011212
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
           GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
                 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
                 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                       US 2000-258730PP 20001229 ----
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OS MARPAT 137:93690

US 2003004189

A1

20030102

IT 442133-97-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

US 2001-15861

US 2000-258730PP 20001229

20011212

(drug candidate; prepn. of nicotinanilide-N-oxides as G-protein-coupled receptor antagonist)

RN 442133-97-3 CAPLUS

CN 3-Pyridinecarboxamide, N-(4-fluorophenyl)-6-[(phenylmethyl)amino]-,
1-oxide (9CI) (CA INDEX NAME)

GI

AΒ Title compds. I, their optical isomers, diastereomers, enantiomers and pharmaceutically acceptable salts [wherein: R1 = R5, R5-heteroalkylene; R5 = H, halo, alkyl, heteroalkyl, etc.; R2, R3 = H, alkyl, heteroalkyl, aryl, etc.; R4 = H, halo, alkyl, heteroalkyl, etc.] were claimed. For example, hydrogen peroxide mediated N-oxidn. of 2-chloro-N-(4-fluorophenyl)-6methylnicotinamide provided claimed oxynicotinamide II in 10% yield. Nicotinanilide N-oxides I are disclosed to inhibit chemokine-mediated cellular and inflammation events. Specific binding of 95 claimed examples to human interleukin 8 and human growth-regulatory oncogene-.alpha. (GRO-.alpha.) chemokine were reported as < or > 40% at 20 .mu.M ligand concn., e.g., compd. II > 40% for GRO-.alpha., were disclosed. Also, the specific binding of 9 claimed examples to human chemokine CCR5, human interleukin-CXCR1, human interleukin-CXCR2, human neuropeptide Y1 and somatostatin, e.g., compd. II: < 40% for CCR5, somatostatin; > 40% for CXCR1, CXCR2; no data for NYP1, were disclosed. A method for the identification of nicotinanilide-N-oxides. I receptors from cell or cellular components and the isolation of compds. I which bind to TNF-.alpha. signaling proteins via affinity bead chromatog. and surface plasmon resonance (SPR) are claimed (no data).

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD.... ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS
- AN 2001:816647 CAPLUS
- DN 135:357948
- TI Preparation of heterocyclic compounds as phosphodiesterase V (PDE V) inhibitors

10197960.1 Page 48

```
Yamada, Koichiro; Matsuki, Kenji; Omori, Kenji; Kikkawa, Kohei
IN
PA
      Tanabe Seiyaku Co., Ltd., Japan
SO
      PCT Int. Appl., 207 pp.
      CODEN: PIXXD2
DT
      Patent
LΑ
      Japanese
FAN.CNT 2
      PATENT NO.
                           KIND DATE
                                                        APPLICATION NO. DATE
PΙ
      WO 2001083460
                            A1 20011108
                                                       WO 2001-JP2034
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
           CO, CR, CO, CZ, DE, DR, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
                 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                        JP 2000-130371 A 20000428
      AU 2001041142
                              A5
                                     20011112
                                                        AU 2001-41142
                                                                               20010315
                                                        JP 2000-130371 A 20000428
                                                        WO 2001-JP2034 W 20010315
      EP 1277741
                                    20030122
                              A1
                                                        EP 2001-912373 20010315
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                         JP 2000-130371 A 20000428
                                                         WO 2001-JP2034 W 20010315
PATENT FAMILY INFORMATION:
     2001:208252
FAN
                            KIND DATE
      PATENT NO.
                                                        APPLICATION NO. DATE
      WO 2001019802
PΙ
                            A1 20010322
                                                       WO 2000-JP6258
           W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
                 CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
                 HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
            RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
                 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
                 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                        JP 1999-261852 A 19990916
                                                        JP 2000-130371 A 20000428
      AU 2000073118
                              A5
                                     20010417
                                                        AU 2000-73118
                                                         JP 1999-261852 A 19990916
                                                         JP 2000-130371 A 20000428
                                                        WO 2000-JP.6258 W 20000913
      JP 2002012587
                              A2
                                     20020115
                                                         JP 2000-277652
                                                                               20000913
                                                         JP 1999-261852 A 19990916
                                                         JP 2000-130371 A 20000428
      BR 2000014526
                              Α
                                    20020618
                                                        BR 2000-14526
                                                                               20000913
                                                        JP 1999-261852 A 19990916
                                                      · JP 2000-130371 A 20000428
                                                        WO 2000-JP6258 W 20000918
      EP 1219609
                                    20020703
                              A1
                                                        EP 2000-960979 20000913
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                 IE, SI, LT, LV, FI, RO, MK, CY, AL
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				JP	1999-261852	Α	19990916
				JP	2000-130371	Α	20000428
				WO	2000-JP6258	W	20000913
US	2003032647	A1	20030213	US	2001-925892		20010810
				JP	1999-261852	Α	19990916
				JP	2000-130371	Α	20000428
				WO	2000-JP6258	A1	20000913
ИО	2002001308	Α	20020424	NO	2002-1308		20020315
				JP	1999-261852	Α	19990916
				JР	2000-130371	Α	20000428
				WO	2000-JP6258	W	20000913
BG	106566	Α	20030228	BG	2002-106566		20020402
				JP	1999-261852	Α	19990916
				JP	2000-130371	А	20000428
				WO	2000-JP6258	W	20000913

OS MARPAT 135:357948

IT 372115-86-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of heterocyclic compds. as phosphodiesterase V inhibitors preventive or therapeutic agents for various diseases due to dysfunction of signal transduction through cGMP)

RN 372115-86-1 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3-chloro-4-methoxyphenyl)methyl]amino]-N-(trans-4-hydroxycyclohexyl)-6-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

GI

AΒ Compds. of the general formula (I) or pharmacol. acceptable salts thereof [wherein X is :CH or N; Y is NH, NR4, S, O, CH:N, N:CH, N:N, CH:CH, or the like; R1 is lower alkoxy, amino, a nitrogenous heterocyclic group, or a hydroxyl group substituted with a heterocyclic group (wherein each group may be substituted); R2 is either a lower alkylamino or lower alkoxy group which may be substituted with aryl, or a lower alkoxy group substituted with a nitrogenous arom. heterocyclic group; and R3 is aryl, a nitrogenous heterocyclic group, lower alkyl, lower alkoxy, lower cycloalkoxy, a hydroxyl group substituted with a nitrogenous heterocyclic group, or amino (wherein each group may be substituted), or alternatively, R3 and the substituent of Y may be united to form a lactone ring] or pharmacol. acceptable salts thereof are prepd. These compds. exhibit excellent PDE V inhibitory activity and are useful as preventive or therapeutic agents for various diseases due to dysfunction of the signal transduction through cGMP, in particular impotence, pulmonary hypertension, and diabetic renal failure paralysis (no data). Thus, 2-(hydroxymethyl)pyridine was treated wit NaH in THF at room temp. for 30 min and then condensed with 2-chloro-5-(3,4,5-trimethoxyphenylcarbonyl)-4-(3-chloro-4methoxybenzylamino)pyrimidine (prepn. given) in THF at room temp. for 1 h to give 2-(2-pyridylmethoxy)-5-(3,4,5-trimethoxyphenylcarbonyl)-4-(3chloro-4-methoxybenzylamino)pyrimidine.

RE CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2003 ACS
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AN 2001:816643 CAPLUS

DN 135:344500

TI Preparation of condensed heteroaryl derivatives as phosphatidylinositol 3-kinase inhibitors and anticancer agents

IN Hayakawa, Masahiko; Kaizawa, Hiroyuki; Moritomo, Hiroyuki; Kawaguchi, Ken-ichi; Koizumi, Tomonobu; Yamano, Mayumi; Matsuda, Koyo; Okada, Minoru; Ohta, Mitsuaki

PA Yamanouchi Pharmaceutical Co., Ltd., Japan; Ludwig Institute for Cancer Research; Imperial Cancer Research Technology Ltd.

SO PCT Int. Appl., 84 pp. CODEN: PIXXD2

DT Patent

LA Japanese

FAN. CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE ------------WO 2001083456 WO 2001-JP3650 A1 20011108 20010426 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG JP 2000-128472 A 20000427 AU 2001052610 **A5** 20011112 AU 2001-52610 20010426 JP 2000-128472 A 20000427 WO 2001-JP3650 W 20010426 US 2001-843615 US 2002151544 A1 20021017 20010426 JP 2000-128472 A 20000427 US 2000-200537PP 20000427 US 2000-200481PP 20000428 EP 1277738 20030122 A1 EP 2001-925981 20010426 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR JP 2000-128472 A 20000427 WO 2001-JP3650 W 20010426 MARPAT 135:344500 371935-25-0P

os

IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of condensed heteroaryl derivs. as phosphatidylinositol 3-kinase inhibitors and anticancer agents)

RN 371935-25-0 CAPLUS

3-Pyridinecarboxamide, N-[3-[4-(4-morpholinyl)pyrido[3',2':4,5]furo[3,2-CN d]pyrimidin-2-yl]phenyl]-6-[(phenylmethyl)amino]-, dihydrochloride (9CI) (CA INDEX NAME)

2 HC1

GI

10197960.1 Page 52

```
AB
      The title compds, e.g. I [n = 0 - 3; R1 = alkyl, etc.; R2, R3 = H, alkyl,
      etc; further detail on R2 and R3 is given; R4 = (un) substituted aryl,
      etc.; X = N, CH; Y = O, S, NH], are prepd. Several compds. of this
      invention in vitro showed IC50 values of .ltoreq. 1 .mu.M against
      phosphatidylinositol 3-kinase (pl10 .alpha. subtype). The antitumor
      activity of compds. of this invention is also demonstrated.
RE.CNT 29
                THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
                ALL CITATIONS AVAILABLE IN THE RE FORMAT
 L4
      ANSWER 10 OF 15 CAPLUS COPYRIGHT 2003 ACS
      2001:565010 CAPLUS
 AN
 DN
      135:137407
 TI
      Preparation of 2-aminonicotinamides as VEGF-receptor tyrosine kinase
      inhibitors
 ΙN
      Manley, Paul William; Bold, Guido
 PA
      Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft
 SO
      PCT Int. Appl., 66 pp.
      CODEN: PIXXD2
 DT
      Patent
      English
 LΑ
 FAN.CNT 1
      PATENT NO.
                        KIND DATE
                                              APPLICATION NO.
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                                              -----
 PΙ
      WO 2001055114
                       A1
                              20010802
                                            WO 2001-EP835
                                                                20010125
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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               HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
               LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
               SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
               YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                              GB 2000-1930
                                                              A 20000127
      BR 2001007805
                              20021022
                                              BR 2001-7805
                         Α
                                                                20010125
                                              GB 2000-1930
                                                              A 20000127
                                              WO 2001-EP835 W 20010125
      EP 1259487
                              20021127
                         A1
                                              EP 2001-946854
                                                               20010125
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                              GB 2000-1930
                                                              A 20000127
                                              WO 2001-EP835 W 20010125
      NO 2002003218
                               20020916
                                              NO 2002-3218
                                                                20020702
                                              GB 2000-1930
                                                              A 20000127
                                              WO 2001-EP835
                                                             W 20010125
      US 2003032656
                         A1
                               20030213
                                              US 2002-181005
                                                                20020711
                                              GB 2000-1930
                                                              A 20000127
                                              WO 2001-EP835 W 20010125
 OS
      MARPAT 135:137407
 IT
      62636-33-3P 352227-86-2P 352227-92-0P
      352228-00-3P
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
      BIOL (Biological study); PREP (Preparation); USES (Uses)
          (prepn. of 2-aminonicotinamides as VEGF-receptor tyrosine kinase
         inhibitors)
```

RN 62636-33-3 CAPLUS

CN 3-Pyridinecarboxamide, 2-[(phenylmethyl)amino]-N-[3-(trifluoromethyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 352227-86-2 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[[3-[(methylamino)carbonyl]phenyl]methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 352227-92-0 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(3-hydroxyphenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

RN 352228-00-3 CAPLUS

Patel

<7/1/2003>

CN 3-Pyridinecarboxamide, 2-[[(4-hydroxyphenyl)methyl]amino]-N-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Page 54

GΙ

$$\begin{array}{c|c}
W \\
NR^{1}R^{2} \\
N \\
R^{3} \\
CRR \mid_{\overline{n}} X \quad I
\end{array}$$

The title compds. [I; n = 1-6; W = O, S; R1, R3 = H, alkyl, acyl; R2 = (un)substituted cycloalkyl, aryl, mono- or bicyclic heteroaryl comprising one or more ring N atoms and 0-2 heteroatoms selected from O and S; R, R' = H, alkyl; X = (un)substituted aryl, mono- or bicyclic heteroaryl comprising one or more ring N atoms and 0-2 heteroatoms selected from O and S] and their pharmaceutically acceptable salts, useful for therapy of a disease which responds to an inhibition of the VEGF-receptor tyrosine kinase activity (such as neoplastic disease), were prepd. and formulated. Thus, amidation of 3-aminobenzotrifluoride with 2-chloronicotinoyl chloride followed by reacting 4-pyridineethanamine with the resulting carboxamide afforded I [n = 2; R, R' = H; X = 4-pyridyl; W = O; R1, R3 = H; R2 = 3-(F3C)C6H4].

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2003 ACS
- AN 1991:514559 CAPLUS
- DN 115:114559
- TI Preparation of 5,11-dihydro-6H-dipyrido [3,2-b:2',3'-e](1,4) diazepines and their use in the prevention or treatment of HIV infection
- IN Hargrave, Karl D.; Schmidt, Guenther; Engel, Wolfhard; Trummlitz, Guenther; Eberlein, Wolfgang

Patel

<7/1/2003>

Boehringer Ingelheim Pharmaceuticals, Inc., USA; Thomae, Dr. Karl, SO Eur. Pat. Appl., 42 pp. CODEN: EPXXDW DT Patent LA English FAN.CNT 3 APPLICATION NO. DATE PATENT NO. KIND DATE ---------------EP 429987 A2 19910605 EP 1990-121954 19901116 EP 429987 **A**3 19920122 B1 19990317 EP 429987 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE US 1989-438923 A 19891117 US 1990-579001 A 19900906 US 1990-600390 A 19901019 CA 2030056 AA19910518 CA 1990-2030056 19901115 С CA 2030056 19951017 US 1989-438923 A 19891117 US 1990-579001 A 19900906 FI 9005674 A 19910518 FI 1990-5674 19901116 FI 94529 В 19950615 FI 94529 С 19950925 US 1989-438923 A 19891117 US 1990-579001 A 19900906 US 1990-600390 A 19901019 NO 9004986 Α 19910521 NO 1990-4986 19901116 NO 175478 B 19940711 NO 175478 С 19941019 US 1989-438923 A 19891117 US 1990-579001 A 19900906 US 1990-600390 A 19901019 HU 56103 A2 19910729 HU 1990-7186 19901116 HU 208139 В 19930830 US 1989-438923 A 19891117 JP 04178386 A2 19920625 JP 1990-311230 19901116 B2 JP 2912007 19990628 US 1989-438923 A 19891117 IL 96367 A1 19970218 IL 1990-96367 19901116 US 1989-438923 A 19891117 IL 1990-94883 A019900627 US 1990-579001 A 19900906 US 1990-600390 A 19901019 AT 177744 E 19990415 AT 1990-121954 19901116 US 1989-438923 A 19891117 US 1990-579001 A 19900906 US 1990-600390 A 19901019 ES 1990-121954 19901116 . ES 2130114 Т3 19990701 US 1989-438923 A 19891117 US 1990-579001 A 19900906 US 1990-600390 A 19901019 AU 9066732 A1 19910523 AU 1990-66732 19901119 AU 630251 B2 19921022 US 1989-438923 A 19891117 US 1990-579001 A 19900906 US 1990-600390 A 19901019 ZA 9009246 Α 19920729 ZA 1990-9246 19901119 US 1989-438923 A 19891117

1019	7960.1			Page 56
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				US 1990-579001 A 19900906
	111. 50407			US 1990-600390 A 19901019
	HU 59407 HU 214595	A2 B	19920528 19980428	HU 1991-2865 19910904
	211373		19900420	US 1990-579001 A 19900906
				US 1990-600390 A 19901019
	RU 2040527	C1	19950725	RU 1992-5011559 19920506
	•			US 1989-438923 A 19891117 US 1990-579001 A 19900906
				US 1990-600390 A 19901019
	US 5366972	Α	19941122	US 1993-91418 19930713
				US 1989-340970 B219890420
				US 1989-372974 B219890628
				US 1989-438923 B219891117 US 1990-579001 B219900906
				US 1990-600390 B219901019
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OS MARPAT 115:114559

IT 132312-45-9P 132362-76-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, in prepn. of antiviral

dihydrodipyridodiazepines)

RN 132312-45-9 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-chloro-3-pyridinyl)-2-[[(4-methoxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)

RN 132362-76-6 CAPLUS

GI

AB Title compds. I (Z = O, S, :NCN, :NOR9; R1-R8 = various subsets of groups selected from H, alkyl, cycloalkyl, fluoroalkyl, aryl, tetrahydrofuryl, alkanoyl, trihalomethyl, alkoxycarbonyl, halo, amino, and many more; R9 =

10197960.1 Page 59

C1-3 alkyl; numerous provisions and exceptions) were prepd. for prevention and treatment of HIV-1 infection. For example, 2-hydroxy-4-methyl-3-nitropyridine was converted by chlorination with POCl3 and redn. to 3-amino-2-chloro-4-methylpyridine, which underwent amidation with 2-chloronicotinoyl chloride and condensation with EtNH2 to give (chloromethylpyridinyl) (ethylamino)pyridinecarboxamide II. Cyclization of II by NaH in DMF at reflux temp. gave I (Z = O, R1 = R3 = R4 = R6-R8 = H, R2 = Et, R5 = Me) (III). At 3 .mu.g/mL, III gave 100% inhibition of HIV-1 replication in a human T-cell culture assay. III also gave 100% inhibition of HIV-1 reverse transcriptase at 10 .mu.g/mL in vitro; no activity was seen for I against 2 related enzymes, indicating high specificity. Three formulations, 77 synthetic examples, and addnl. test results including cytotoxicity are given.

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AN 1991:449732 CAPLUS

DN 115:49732

TI Preparation of 5,11-dihydro-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepin-6-ones and thiones and their use in the prevention or treatment of AIDS

IN Schmidt, Guenther; Engel, Wolfhard; Trummlitz, Guenter; Eberlein, Wolfgang; Hargrave, Karl D.

PA Boehringer Ingelheim Pharmaceuticals, Inc., USA; Thomae, Dr. Karl, G.m.b.H.

SO Eur. Pat. Appl., 20 pp. CODEN: EPXXDW

DT Patent

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10197960.1 Page 62
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OS MARPAT 115:49732

IT 132312-45-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction of, in prepn. of drug for treatment of AIDS)

RN 132312-45-9 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-chloro-3-pyridinyl)-2-[[(4-methoxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)

GI

The title compds. I [Z = O, S; R1 = H, (substituted) alkyl, arylmethyl, etc.; R2 = H, (substituted) alkyl, alkenyl, etc.; R3-R8 = H, or 1 of R3-R8 is alkyl, alkoxy, alkylthio, etc., and the remaining 5 of R3-R8 are each H, or R3-R5 are H, alkyl with the proviso that at least one is H or 1 of R3-R5 is Bu with the remaining 2 being H; and R6-R8 are H, alkyl with the proviso that at least 1 is H, or 1 of R6-R8 is Bu with the remaining 2 being H; with the proviso that when R1 and R2 are H, alkyl and R3-R8 are all H then Z is S] were prepd. A mixt. of 5,11-dihydro-11-ethyl-5-methyl-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepin-6-one and Lawesson's reagent in toluene was refluxed for 2.5 h to give I (R1 = Me; Z = S; R2 = Et; R3 = R4 = R5 = R6 = R7 = R8 = H), which at 10 .mu.g/mL gave 100% in vitro inhibition of reverse transcriptase.

L4 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2003 ACS

Ι

- AN 1991:449642 CAPLUS
- DN 115:49642
- TI Novel non-nucleoside inhibitors of HIV-1 reverse transcriptase. 1. Tricyclic pyridobenzo- and dipyridodiazepinones
- AU Hargrave, Karl D.; Proudfoot, John R.; Grozinger, Karl G.; Cullen, Ernest; Kapadia, Suresh R.; Patel, Usha R.; Fuchs, Victor U.; Mauldin, Scott C.; Vitous, Jana; et al.
- CS Boehringer Ingelheim Pharm., Inc., Ridgefield, CT, 06877, USA
- SO Journal of Medicinal Chemistry (1991), 34(7), 2231-41 CODEN: JMCMAR; ISSN: 0022-2623
- DT Journal
- LA English
- OS CASREACT 115:49642
- IT 132312-45-9P
 - RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and reductive intramol. cyclocondensation of,
 dipyridodiazepinone from)
- RN 132312-45-9 CAPLUS
- CN 3-Pyridinecarboxamide, N-(2-chloro-3-pyridinyl)-2-[[(4-methoxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)

GI

AB Novel pyrido [2,3-b] [1,4] benzodiazepinones, pyrido [2,3b] [1,5] benzodiazepinones, and dipyrido [3,2-b:2',3'-e] [1,4] diazepinones e.g., I (X = N, X1 = CH; X = CH; X1 = N) and II inhibited human immunodeficiency virus type 1 reverse transcriptase in vitro at concns. as low as 35 nM. In all three series, small substituents (e.g., Me, Et, Ac) are preferred at the lactam nitrogen, whereas slightly larger alkyl moieties (e.g., Et, cyclopropyl) are favored at the other (N-11) diazepinone nitrogen. In general, lipophilic substituents are preferred on the A ring, whereas substitution on the C ring generally reduces potency relative to the corresponding compds. with no substituents on the arom. ring. Max. potency is achieved with Me substitution at the position ortho to the lactam nitrogen atom; however, in this case an unsubstituted lactam nitrogen is preferred. Addnl. substituents on the A ring can be readily tolerated. II (BI-RG-587) is a potent (IC50 = 84 nM) and selective non-nucleoside inhibitor of HIV-1 reverse transcriptase, and has been chosen for preclin. development. II is noncytotoxic except at high doses and effective against all clin. isolates of HIV-1, including those which are AZT-resistant. It is specific for HIV-1, ineffective against HIV-2, inactive against simian and feline reverse transcriptase, and does not inhibit DNA polymerases.

- L4 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS
- AN 1991:102069 CAPLUS
- DN 114:102069
- TI Preparation of 5,11-dihydro-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepin-6-ones as drugs for prevention or treatment of AIDS

10197960.1 . Page 65

Schmidt, Guenther; Engel, Wolfhard; Trummlitz, Guenter; Eberlein, IN Wolfgang; Hargrave, Karl D. PA Boehringer Ingelheim Pharmaceuticals, Inc., USA; Thomae, Dr. Karl, SO Eur. Pat. Appl., 21 pp. CODEN: EPXXDW DT Patent LΑ English FAN.CNT 3 PATENT NO. KIND DATE APPLICATION NO. DATE --**--**--------PΙ EP 393529 **A**1 19901024 EP 1990-107098 19900412 EP 393529 B1 19930630 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE US 1989-340970 A 19890420 AT 91128 Ē 19930715 AT 1990-107098 19900412 US 1989-340970 A 19890420 EP 1990-107098 A 19900412 ES 2058656 Т3 19941101 ES 1990-107098 19900412 US 1989-340970 A 19890420 CA 2014771 19901020 CA 1990-2014771 19900418 AA US 1989-340970 A 19890420 JP 03063276 A2 19910319 JP 1990-104379 19900419 JP 2851913 B2 19990127 US 1989-340970 A 19890420 US 5366972 US 1993-91418 Α 19941122 19930713 US 1989-340970 B219890420 US 1989-372974 B219890628 US 1989-438923 B219891117 US 1990-579001 B219900906 US 1990-600390 B219901019 US 1991-740828 B119910805 US 5620974 Α 19970415 US 1994-279464 19940722 US 1989-340970 B219890420 US 1989-372974 B219890628 US 1989-438923 B219891117 US 1990-579001 B219900906 US 1990-600390 B219901019 US 1991-740828 B119910805 US 1993-91418 A319930713 PATENT FAMILY INFORMATION: FAN 1991:449732 PATENT NO. KIND DATE APPLICATION NO. DATE ----------------**--**--------Al PΙ EP 410148 19910130 EP 1990-112072 19900626 B1 EP 410148 19940406 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE US 1989-372974 A 19890628 CA 1990-2019812 19900626 CA 2019812 AA19901228 US 1989-372974 A 19890628 DD 295849 A5 19911114 DD 1990-342100 19900626 US 1989-372974 A 19890628 AT 103918 Е 19940415 AT 1990-112072 19900626 US 1989-372974 A 19890628 EP 1990-112072 A 19900626 ES 2063202 T3 19950101 ES 1990-112072 19900626 US 1989-372974 A 19890628 NO 9002851 Α 19910102 NO 1990-2851 19900627

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US 1989-438923 A 19891117 US 1990-579001 A 19900906 US 1990-600390 A 19901019

OS MARPAT 114:102069

IT 132312-45-9P 132362-76-6P

RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as intermediate for dipyridodiazepinone reverse transcriptase inhibitor)

RN 132312-45-9 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-chloro-3-pyridinyl)-2-[[(4methoxyphenyl)methyl]amino]- (9CI) (CA INDEX NAME)

$$\bigcap_{R}^{N} \operatorname{NH-CH}_{2}$$

RN 132362-76-6 CAPLUS

CN 3-Pyridinecarboxamide, N-(2-chloro-3-pyridinyl)-2-[(phenylmethyl)amino]-(9CI) (CA INDEX NAME)

GΙ

AB The title compds. (I; R1, R2 = H, C1-5 alkyl), were prepd. Thus, N-(2-chloro-3-pyridinyl)-2-[[(4-methoxyphenyl)methyl]amino]-3-pyridinecarboxamide (prepn. given) was refluxed 8 h with NaH in DMF to

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3 10:18:11 AM
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Search History

I Number	Hits	Search Text	DB	Time stamp
1	5221	("514/183,188,277,352,354,356").CCLS	USPAT	2003/07/02 09:57
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e	189	189 (("514/183,188,277,352,354,356").CCLS) and (("546/304,315,345").CCLS)	USPAT	2003/07/02 09:58
4	37	(("514/183,188,277,352,354,356").ccLS) and (("546/304,315,345").ccLS))	USPAT	2003/07/02 09:58
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NEWS 5 Aug 19
                Aquatic Toxicity Information Retrieval (AQUIRE)
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NEWS 6
        Aug 26
                Sequence searching in REGISTRY enhanced
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                JAPIO has been reloaded and enhanced
NEWS 8
        Sep 16
                Experimental properties added to the REGISTRY file
NEWS 9
        Sep 16
                CA Section Thesaurus available in CAPLUS and CA
NEWS 10 Oct 01
                CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11
        Oct 24
                BEILSTEIN adds new search fields
                Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 12 Oct 24
NEWS 13 Nov 18 DKILIT has been renamed APOLLIT
NEWS 14 Nov 25 More calculated properties added to REGISTRY
NEWS 15 Dec 04 CSA files on STN
NEWS 16 Dec 17
                PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17 Dec 17
                TOXCENTER enhanced with additional content
NEWS 18 Dec 17
                Adis Clinical Trials Insight now available on STN
NEWS 19
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                Simultaneous left and right truncation added to COMPENDEX,
                ENERGY, INSPEC
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NEWS 21 Feb 24 METADEX enhancements
NEWS 22
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NEWS 23 Feb 24
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NEWS 25 Feb 26
                PCTFULL now contains images
NEWS 26 Mar 04
                SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27 Mar 20
                EVENTLINE will be removed from STN
NEWS 28 Mar 24
                PATDPAFULL now available on STN
NEWS 2'9
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                structures available in REGISTRY
NEWS 30 Apr 11 Display formats in DGENE enhanced
NEWS 31 Apr 14
                MEDLINE Reload
NEWS 32 Apr 17 Polymer searching in REGISTRY enhanced
NEWS 33 Jun 13
                Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 34 Apr 21
                New current-awareness alert (SDI) frequency in
                WPIDS/WPINDEX/WPIX
NEWS 35 Apr 28
                RDISCLOSURE now available on STN
                Pharmacokinetic information and systematic chemical names
NEWS 36 May 05
                added to PHAR
NEWS 37
        May 15 MEDLINE file segment of TOXCENTER reloaded
NEWS 38
        May 15 Supporter information for ENCOMPPAT and ENCOMPLIT updated
NEWS 39
        May 16 CHEMREACT will be removed from STN
NEWS 40 May 19 Simultaneous left and right truncation added to WSCA
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NEWS 41 May 19 RAPRA enhanced with new search field, simultaneous left and right truncation

NEWS 42 Jun 06 Simultaneous left and right truncation added to CBNB

NEWS 43 Jun 06 PASCAL enhanced with additional data

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FILE 'HOME' ENTERED AT 07:27:51 ON 01 JUL 2003

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.21 0.21

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STRUCTURE FILE UPDATES: 29 JUN 2003 HIGHEST RN 539790-82-4 DICTIONARY FILE UPDATES: 29 JUN 2003 HIGHEST RN 539790-82-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS

L1 STR

G1 CH2, CH, SO2

G2 Cb,Cy,Hy

Structure attributes must be viewed using STN Express query preparation:

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29 ANSWERS

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FILE 'CAPLUS' ENTERED AT 07:28:46 ON 01 JUL 2003

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FILE COVERS 1907 - 1 Jul 2003 VOL 139 ISS 1 FILE LAST UPDATED: 30 Jun 2003 (20030630/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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- L4 ANSWER 1 OF 36 CAPLUS COPYRIGHT 2003 ACS
- AN 2003:242305 CAPLUS
- DN 138:271675
- TI Preparation of 4,5-dihydro-1H-benzo[g]indazole-3-carboxamides for the treatment of inflammation
- IN Bergmanis, Arija A.; Bonafoux, Dominique; Clare, Michael; Crich, Joyce Z.; Fletcher, Theresa R.; Geng, Lifeng; Hagen, Timothy J.; Hamper, Bruce C.; Hanson, Gunnar J.; Houdek, Stephen C.; Huang, He; Iula, Donna M.; Koszyk, Francis J.; Lennon, Patrick J.; Liao, Shuyuan; Liao, Subo; Metz, Suzanne; Mohler, Scott B.; Nguyen, Maria; Oburn, David S.; Owen, Thomas J.; Partis, Richard A.; Scates, Angela M.; Stealey, Michael A.; Tollefson, Michael B.; Vazquez, Michael L.; Weier, Richard M.; Wolfson, Serge G.; Xu, Xiangdong
- PA Pharmacia Corporation, USA
- SO PCT Int. Appl., 331 pp. CODEN: PIXXD2
- DT Patent
- LA English
- FAN CNT 1

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RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 15 OF 36 CAPLUS COPYRIGHT 2003 ACS
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      2000:53572 CAPLUS
      132:93104
 DN
      Preparation of sulfur substituted sulfonylaminocarboxylic acid
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      N-arylamides as modulators of cyclic guanosine monophosphate (cGMP)
      Schindler, Ursula; Schonafinger, Karl; Strobel, Hartmut
                                                                              105 (2)
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      Hoechst Marion Roussel Deutschland G.m.b.H., Germany
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      PCT Int. Appl., 87 pp.
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PATENT FAMILY INFORMATION:

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DE 1999-19903126A 19990127 WO 1999-EP4426 W 19990625

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     MARPAT 132:93104
IT
     254877-06-0P 254877-07-1P 254878-43-8P
     254975-95-6P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of sulfur substituted sulfonylaminocarboxylic acid N-arylamides
        as modulators of cyclic guanosine monophosphate (cGMP) prodn.)
     254877-06-0 CAPLUS
RN
CN
     3-Pyridinecarboxamide, N-[4-[[4-(aminocarbonyl)-1-
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piperidinyl]sulfonyl]phenyl]-2-[[(4-chlorophenyl)sulfonyl]amino]- (9CI)
(CA INDEX NAME)

RN 254877-07-1 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-chlorophenyl)sulfonyl]amino]-N-[4-(1-piperidinylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

RN 254878-43-8 CAPLUS

CN Benzenesulfonyl fluoride, 4-[[[2-[[(4-chlorophenyl)sulfonyl]amino]-3-pyridinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 254975-95-6 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-chlorophenyl)sulfonyl]amino]-N-[4-[[(2R,6S)-2,6-dimethyl-4-morpholinyl]sulfonyl]phenyl]-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

GΙ

The title compds. [I; Al = (un) substituted phenylene, naphthylene, AB heteroarylene; ring A2 comprises the carbon atoms which carry the groups C(:X)NH and NHSO2R2 is a benzene, naphthalene, (un)satd. 3-7 membered carbocycle, etc.; R1 = (un) substituted aryl, heterocyclyl, C1-18 alkyl; R2 = (un)substituted aryl, heterocyclyl, C1-10 alkyl, etc.; R3 = H, halo, CF3, etc.; n = 0-2; X = 0, NH], useful for the therapy and prophylaxis of diseases, for example of cardiovascular diseases such as hypertension, angina pectoris, cardiac insufficiency, thromboses or atherosclerosis, were prepd. The compds. I are capable of modulating the body's prodn. of cyclic guanosine monophosphate (cGMP) and are generally suitable for the therapy and prophylaxis of diseases which are assocd. with a disturbed cGMP balance. Thus, reacting 4-{[2-(4-chlorophenylsulfonyl)-4,5dimethoxybenzoyl]amino}benzenesulfonyl fluoride (prepn. given) with thiomorpholine afforded 65% II which showed 34.8-fold stimulation ([cGMP]test substance/[cGMP]control) at 50 .mu.M.

(ora)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 36 CAPLUS COPYRIGHT 2003 ACS

AN 2000:31524 CAPLUS

DN 132:93102

TI Preparation of arylsulfonylaminoarylamides as guanylate cyclase activators.

IN Schindler, Ursula; Schoenafinger, Karl; Strobel, Hartmut

PA Hoechst Marion Roussel Deutschland G.m.b.H., Germany

SO Ger. Offen., 24 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 2

| 1 2 114 | CIVI 2 | • | • | |
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| | PATENT NO. | KIND DATE | APPLICATION NO. DATE | |
| | | | | · |
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| | WO 2000002851 | A1 20000120 | WO 1999-EP4426 199906 | 525 |
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WO 1999-EP4426 W 19990625 |

OS MARPAT 132:93102

IT 254877-05-9P 254877-06-0P 254877-07-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylsulfonylaminoarylamides as guanylate cyclase activators)

RN 254877-05-9 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-chlorophenyl)sulfonyl]amino]-N-[4-[(2,6-dimethyl-4-morpholinyl)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

RN 254877-06-0 CAPLUS

CN 3-Pyridinecarboxamide, N-[4-[[4-(aminocarbonyl)-1-piperidinyl]sulfonyl]phenyl]-2-[[(4-chlorophenyl)sulfonyl]amino]- (9CI) (CA INDEX NAME)

RN 254877-07-1 CAPLUS

CN 3-Pyridinecarboxamide, 2-[[(4-chlorophenyl)sulfonyl]amino]-N-[4-(1-piperidinylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

IT 254878-43-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of arylsulfonylaminoarylamides as guanylate cyclase activators)

RN 254878-43-8 CAPLUS

CN Benzenesulfonyl fluoride, 4-[[[2-[[(4-chlorophenyl)sulfonyl]amino]-3-pyridinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

GI

AB Title compds. [I; A1 = (substituted) phenylene, naphthylene, heteroarylene; A2 = atoms to form Ph, naphthyl, carbocyclyl, heterocyclyl rings; R1 = (substituted) aryl, heterocyclyl, alkyl; R2 = R1, amino; R3 = .gtoreq.1 of H, halo, CF3, OH, alkoxy, alkoxyalkoxy, aryloxy, NO2, cyano, amino, CO2H, etc.; X = O, NH, etc.; n = 0-2], were prepd. Thus, 4-[[2-(4-chlorphenylsulfonylamino)-4,5-dimethoxybenzoyl]amino]benzenesulfo nyl fluoride was heated in thiomorpholine at 90.degree. for 30 min. to give 65% 2-(4-chlorophenylsulfonylamino)-4,5-dimethoxy-N-[4-(thiomorpholin-4-sulfonyl)phenyl]benzamide. The latter at 50 .mu.M gave 34.8-fold stimulation of sol. guanylate cyclase.

L4 ANSWER 17 OF 36 CAPLUS COPYRIGHT 2003 ACS

AN 1999:784082 CAPLUS

DN 132:22963

TI Preparation of N-(pyrazolylphenyl)alkanamides and analogs as IL-2 production inhibitors

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